CLAIMS

- 1. Biosensor, characterised in that at least one carbohydrate derivative with ability to bind a protein, virus or a cell in a sample is bound to a surface in the biosensor.
- 2. Biosensor according to claim 1 above, characterised in that the carbohydrate derivative is chemically bound or is bound via adsorption to a surface which constitutes one part of the biosensors signal transducer part.
- 3. Biosensor according to claim 1, where the carbohydrate part of the carbohydrate derivative contains at least one component consisting of hexosamine-, fucose-, galactose- glucose-, mannose-, xylose-, N-acetylneuraminic acid residue or an analog thereof.
- 4. Biosensor according to claim 1, where the carbohydrate part of the carbohydrate derivative contains at least one component consisting of hexosamine-, fucose-, galactose- glucose-, mannose-, xylose-, N-acetylneuraminic acid residue or an analog thereof, which has been derivatised in at least one of their hydroxyl groups or amino groups with an organic or inorganic group.
- 5. Biosensor according to one or more of the claims above, in which the carbohydrate derivative contains at least one O-, N-, S-, or C-glycosidically bound aglycon.
- 6. Biosensor according to one or more of the claims above, in which the aglycon part of the carbohydrate derivative contains at least one alifatic or aromatic compound.
- 7. Biosensor according to one or more of the claims above, in which the aglycon part of the carbohydrate derivative contains an amino acid-, peptide- or protein component.
- 8. Biosensor according to one or more of the claims above, in which the carbohydrate derivative consist of a glycoprotein or a neoglycoprotein which is bound covalently or via adsorption to a surface which consist of the signal

transducing part of the biosensor.

- 9. Biosensor according to claim 1, in which the biosensor is an optical biosensor which gives a signal change at the binding of a protein, a viurs or a cell to a surface in the biosensor.
- 10. Biosensor according to claim 9, in which the optical biosensor use surface plasmon changes, ellipsometri, reflection measurement or polarisation measurement.
- 11. Biosensor according to claim 1, in which the biosensor is based on a piezoelectric crystal, electrochemical electrode or a thermistor.
- 12. Biosensor according to claim 1, in which the carbohydrate is an oligosaccharide or a derivative thereof which is bound via an aglycon to a surface of the biosensor.
- 13. Biosensor according to claim 1, in which the carbohydrate is an oligosaccharide or a derivative thereof which is bound via an aglycon to a gold surface of the biosensor.
- 14. Method to bind a carbohydrate or a derivative thereof to a gold surface, characterised in that the surface first is coated with a thiol compound which contain an organic group which can be used for chemical binding of a carbohydrate or a derivative thereof.
- 15. Gold surface modified with a carbohydrate or a derivative thereof.
- 16. Use of biosensor according to claim 1 for determination of or analysis of a protein, a virus or a cell.

